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10/756,773

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Tomoaki Endo

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EXAMINER

WASHINGTON, JAMARES

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/756,773	<b>Applicant(s)</b> ENDO ET AL.	
	<b>Examiner</b> JAMARES WASHINGTON	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 69-91 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 69-91 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09383927.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

Amendments and response received June 19, 2008 have been entered. Claims 69-91 are pending in this application. Claims 69-71, 73-75, 78-81, 83-85, 88 and 89 have been amended. Claims 90 and 91 have been newly added. Amendments and response are addressed hereinbelow.

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09383927, filed on August 26, 1999.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2625

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 69-73, 75-83 and 85-89 are rejected under 35 U.S.C. 102(e) as being anticipated by Yousef R. Yacoub (US 6552813 B2).

Regarding claim 69, Yacoub discloses an information processing apparatus (Fig. 5 numeral 600 client station) for controlling via a communication medium (Fig. 5 numeral 650 network) a peripheral (Fig. 5 numeral 660 or 670, printers) that processes a job, which executes a predetermined service, the apparatus comprising:

an obtaining unit adapted to obtain (Fig. 5 numeral 610 virtual printer via numeral 620 network interface), via the communication medium (Fig. 5 network 650, communication medium), function information that includes information indicating plural setting values executable by the peripheral ("Virtual printer 610 receives other data, from the server 680 or a database in client 600, such as the capabilities of the printers so that the virtual printer can find the most appropriate printer, one that complies with the user's print job preferences" at Col. 11 line 46. Information regarding the capabilities of the printers reads on information indicating plural setting values as each function has to be given a value indicating it's capability to perform or a value indicating the function cannot be performed); and

an inhibition unit (Fig. 5 numeral 610 virtual printer) adapted to, if at least one of setting values of a job (i.e., color/grayscale/black and white capabilities at Col. 5 line 46) to be issued by the information processing apparatus does not satisfy a predetermined condition related to the plural setting values indicated by the function information obtained by the obtaining unit, inhibit

Art Unit: 2625

issuance of the job (Col. 5 lines 22-30 wherein only the appropriate printers, according to the parameters set for the print job, are found and ranked. This indicates all other printers not capable of performing the required functions will not be chosen to have the job issued, thereby reading on inhibiting issuance of the job to these particular printers not capable of performing the functions required.);

wherein the inhibition unit allows issuance of the job if the setting values of the job satisfy the predetermined condition (Col. 5 lines 30-34 wherein the most appropriate printer is chosen for printing the job as the setting values (i.e., a fast job pertaining color is preferred) satisfy the predetermined condition. The predetermined condition(s) being the printer being capable of carrying out the print job as desired by user by the comparison of the attributes of the print job to the attributes capable of being implemented by the printer).

Regarding claim 70, Yacoub discloses an information processing apparatus according to Claim 69, wherein the function information obtained by the obtaining unit includes information indicating a job attribute range executable by the peripheral ("... speed can be variable and have many values from which the user can choose, such as slow, slower, fast, fastest or medium" Col. 5 lines 15. This indicates a "range" of one of the attributes of the printer), and further comprising a display unit (Fig. 5 numeral 640 user interface) adapted to distinguishably display the job attribute range on a user interface (Col. 11 lines 25-28; as mentioned before, the range of speed is an attribute that can be selected on the interface) provided in a control program for controlling the peripheral based on the obtained function information (Col. 11 line 31-36 wherein the preferences selected by the user are sent to the virtual printer which "controls" the "appropriate"

Art Unit: 2625

printer to output the preferences selected. Col. 11 lines 3-6 wherein software (a control program) manages hardware within the system).

Regarding claim 71, Yacoub discloses an information processing apparatus according to Claim 69, wherein the obtaining unit obtains information indicating a function setting range executable by the peripheral ("... speed can be variable and have many values from which the user can choose, such as slow, slower, fast, fastest or medium" Col. 5 lines 15. This indicates a "range" of one of the attributes of the printer).

Regarding claim 72, Yacoub discloses an information processing apparatus according to Claim 71, wherein the information indicating the function setting range is expressed with a combination of attributes for which a job setting is inhibited ("Virtual printer 610 receives other data, from the server 680 or a database in client 600, such as the capabilities of the printers so that the virtual printer can find the most appropriate printer, one that complies with the user's print job preferences" at Col. 11 line 46; Which, by default, indicates attributes of which the printer is not capable of performing).

Regarding claim 73, Yacoub discloses an information processing apparatus according to Claim 69, wherein the obtaining unit obtains information indicating a function selectable in the peripheral ("Virtual printer 610 receives other data, from the server 680 or a database in client 600, such as the capabilities of the printers..." Col. 11 line 46).

Regarding claim 75, Yacoub discloses an information processing apparatus according to Claim 69, wherein the obtaining unit obtains from the peripheral an attribute list indicating functions corresponding to one of a physical device control program, a logical device control program, a resource control program of the peripheral and a coordinate control program for coordination thereof ("Further, while some printers are capable of understanding one of the printer languages such as either Postscript or PCL but not both, a further print job preference may be the printer language which either the software/application used in generating the print job" at Col. 8 line 26. Indicating an attribute sent to the "virtual printer" for making determinations can include the language supported by the peripheral which is readable on a logical device control program; Fig. 4 shows the layout of a typical office suite having both laser and inkjet printing devices, indicating information obtained from the peripheral devices will include the type of printer which would be controlled by the client station. Therefore, physical device control programs would need to be acquired in order to print from both laser and inkjet printers located in the office setting).

Regarding claim 76, Yacoub discloses an information processing apparatus according to Claim 75, wherein the physical device control program includes at least one of a scanner control program that controls a scanner engine of the peripheral, a laser beam printer control program that controls a laser beam printer engine of the peripheral, and an ink jet printer control program that controls an ink jet printer engine of the peripheral (see rejection of claim 75; Suggesting laser and inkjet printers are controlled).

Art Unit: 2625

Regarding claim 77, discloses an information processing apparatus according to Claim 75, wherein the logical device control program includes at least one of a print job control program that controls a laser beam printer control program, a print job control program that controls an ink jet printer control program, a print job control program that controls the laser beam printer control program and the ink jet printer control program, a scan job control program that controls a scanner control program, a copy job control program that controls the scanner control program and the laser beam printer control program, and a copy job control program that controls the scanner control program and the ink jet printer control program (see rejection of claim 75 wherein print job control programs, using either PCL or Postscript languages, are utilized to control the laser and inkjet printers).

Regarding claim 78, Yacoub discloses an information processing apparatus according to Claim 69, wherein the obtaining unit obtains the function information from the peripheral (Col. 5 lines 41-44 wherein the virtual printer will query...all printers present in...an office suite...").

Regarding claim 79, Yacoub discloses an information processing method for controlling via a communication medium a peripheral that processes a job which executes a predetermined service (see rejection of claims 69; apparatus implementing the method), the method comprising steps of:

obtaining, via the communication medium, function information that includes information indicating plural setting values executable by the peripheral (see rejection of claim 69); and



Art Unit: 2625

if at least one of setting values of a job to be issued by the information processing apparatus does not satisfy a predetermined condition related to the plural setting values indicated by the function information obtained in the obtaining step, inhibiting issuance of the job (see rejection of claim 69);

wherein the inhibiting step includes allowing issuance of the job, if the setting values of the job satisfy the predetermined condition (see rejection of claim 69).

Regarding claim 80, Yacoub discloses an information processing method according to Claim 79, wherein the function information obtained in the obtaining step includes information indicating a job attribute range executable by the peripheral, and wherein the method further comprises a step of distinguishably displaying on a display unit the job attribute range on a user interface provided in a control program for controlling the peripheral based on the obtained function information (see rejection of claim 70).

Regarding claim 81, Yacoub discloses an information processing method according to Claim 79, wherein the obtaining step includes obtaining information indicating a function setting range executable by the peripheral (see rejection of claim 71).

Regarding claim 82, Yacoub discloses an information processing method according to Claim 81, wherein the information indicating the function setting range is expressed with a combination of attributes for which a job setting is inhibited (see rejection of claim 72).

Art Unit: 2625

Regarding claim 83, Yacoub discloses an information processing method according to Claim 79, wherein the obtaining step includes obtaining information indicating a function selectable in the peripheral (see rejection of claim 73).

Regarding claim 85, Yacoub discloses an information processing method according to Claim 79, wherein the obtaining step includes obtaining from the peripheral an attribute list indicating functions corresponding to one of a physical device control program, a logical device control program, a resource control program of the peripheral and a coordinate control program for coordination thereof (see rejection of claim 75).

Regarding claim 86, Yacoub discloses an information processing method according to Claim 85, wherein the physical device control program includes at least one of a scanner control program that controls a scanner engine of the peripheral, a laser beam printer control program that controls a laser beam printer engine of the peripheral, and an ink jet printer control program that controls an ink jet printer engine of the peripheral (see rejection of claim 76).

Regarding claim 87, Yacoub discloses an information processing method according to Claim 85, wherein the logical device control program includes at least one of a print job control program that controls a laser beam printer control program, a print job control program that controls an ink jet printer control program, a print job control program that controls the laser beam printer control program and the ink jet printer control program, a scan job control program that controls a scanner control program, a copy job control program that controls the scanner

Art Unit: 2625

control program and the laser beam printer control program, and a copy job control program that controls the scanner control program and the ink jet printer control program (see rejection of claim 77).

Regarding claim 88, Yacoub discloses an information processing method according to Claim 79, wherein the obtaining step includes obtaining the function information from the peripheral (see rejection of claim 78).

Regarding claim 89, Yacoub discloses a computer-readable storage medium, storing, in executable form, a program for causing an information processing apparatus to control via a communication medium a peripheral that processes a job, which executes a predetermined service, implementing the method as described in claim 79 above (Col. 11 lines 16-19 wherein the virtual printer can be a combination of software and hardware which reads on a storage medium storing the program to implement the method as rejected in claim 79 above).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2625

5. Claims 74 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yacoub in view of Shee-Yen Tan et al (US 5978560).

Regarding claim 74, Yacoub discloses an information processing apparatus according to claim 69, wherein said obtaining unit obtains from the peripheral an attribute list indicating functions of the peripheral ("Virtual printer 610 receives other data, from the server 680 or a database in client 600, such as the capabilities of the printers..." Col. 11 line 46).

Yacoub fails to disclose or suggest the obtaining unit obtains a value of an attribute by designating an ID of the attribute in the attribute list.

Tan et al, in the same field of endeavor of distributing job requests to peripheral devices according to retrieved attributes (Col. 1 lines 44-47, Tan et al), teaches obtaining a value of an attribute by designating an ID of the attribute in the attribute list (Fig. 4 shows the attributes listed in the database 600 are each given an ID (MCJP, NJOD, NCJ...) which are provided a value (1, 5, 10...). These values are received by the supervisor to "load balance" print jobs described at Col. 5 lines 31-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the apparatus and method as disclosed by Yacoub wherein the obtaining unit obtains from a peripheral an attribute list indicating functions of the peripheral to utilize the teachings of Tan et al wherein a value of an attribute is obtained by designating an ID of the attribute in the attribute list to offer a more uniform indicator for the capabilities of the peripheral devices.

Art Unit: 2625

Regarding claim 84, Yacoub discloses an information processing method according to Claim 79, wherein said obtaining step includes obtaining from the peripheral an attribute list indicating functions of the peripheral, and obtaining a value of an attribute by designating an ID of the attribute in the attribute list (see rejection of claim 74).

6. Claims 90 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yacoub in view of Koichi Murakami (EP 0529692 A2).

Regarding claim 90, Yacoub discloses an information processing apparatus according to claim 69.

Yacoub fails to disclose wherein the setting values of a job include a setting value as to a number of print sheets and a setting value as to a finisher device of the peripheral, and wherein the inhibition unit inhibits issuance of the job if the setting value as to the number of print sheets exceeds a predetermined value.

Murakami, in the same field of endeavor of print job finishing determining (, teaches wherein a setting value of a job includes a setting value as to a number of print sheets (Col. 16 lines 47-48 wherein the count of the originals is taken) and a setting value as to a finisher device of the peripheral (Col. 16 lines 47-48 wherein a setting value for a finisher device has to be determined in order to compare the count of the originals), and wherein the issuance of the job is inhibited if the setting value as to the number of print sheets exceeds a predetermined value (Col. 16 lines 51-52 wherein the job may be prohibited if the count or the originals exceeds the devices finishing capabilities).

Art Unit: 2625

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the information processing apparatus as disclosed by Yacoub to utilize the obtaining unit for obtaining a number of print sheets and a setting value as to a finisher device of a peripheral and wherein the issuance of the job is inhibited if the setting value as to the number of print sheets exceeds a predetermined value as taught by Murakami to avoid possible staple jams from stapler being over charged or incurring any other damage to a finishing device due to excessive use.

Regarding claim 91, Yacoub discloses an information processing method according to claim 79, wherein the setting values of a job include a setting value as to a number of print sheets and a setting value as to a finisher device of the peripheral, and wherein the inhibiting step inhibits issuance of the job if the setting value as to the number of print sheets exceeds a predetermined value (see rejection of claim 90).

### ***Double Patenting***

In light of the amendments to the claims further distinguishing Applicant's current invention over Applicant's previous invention, Examiner withdraws previous rejections regarding double patenting.

*Response to Arguments*

7. Applicant's arguments filed June 19, 2008 have been fully considered but they are not persuasive.

Applicant's remarks: Yacoub is silent regarding whether a print job is inhibited or allowed to issue based on setting values executable by a printer.

That is, nothing has been found in Yacoub that is believed to teach or suggest an information processing apparatus for controlling via a communication medium a peripheral that processes a job for a predetermined service, in which the apparatus includes "an inhibition unit adapted to, if at least one of setting values of a job to be issued by the information processing apparatus does not satisfy a predetermined condition related to the plural setting values indicated by the function information obtained by the obtaining unit, inhibit issuance of the job," wherein "the inhibition unit allows issuance of the job if the setting values of the job satisfy the predetermined condition," as recited in Claim 69.

Examiner's response: The "inhibition unit adapted to, if at least one of setting values of a job to be issued by the information processing apparatus does not satisfy a predetermined condition related to the plural setting values indicated by the function information obtained by the obtaining unit, inhibit issuance of the job" is taken to simply mean inhibiting the sending of a print job from a computing apparatus to a printer which does not have the capabilities of carrying out the predetermined processes by comparing an "attribute" or "parameter" list of the image

Art Unit: 2625

output device with the "attributes" or "parameters" required by the print job. Yacoub clearly reads on this concept wherein the "Virtual printer 610 receives other data, from the server 680 or a database in client 600, such as the capabilities of the printers so that the virtual printer can find the most appropriate printer, one that complies with the user's print job preferences" at Col. 11 line 46 as rejected in claim 69 above. It is clear from the disclosure that the job is inhibited from being sent to a printer which is less appropriate to use for the job. See rejection and statements regarding claim 69 above.

### *Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



Art Unit: 2625

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMARES WASHINGTON whose telephone number is (571)270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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September 18, 2008